United States Department of Agriculture Forest Service

Aviation Safety Alert

NO. 2003-01 Page 1 of 1

SUBJECT: Turbine Engine Compressor Stalls

AREA OF CONCERN: Helicopter Operations

DISCUSSION: If you ever hear a sharp rumble or series of loud "reports" like a shotgun coming from a turbine powered helicopter, the engine may have experienced a compressor stall (air flow reversal). This can cause the engine not to produce power and may lockup a power/drive train component (i.e. transmission, drive shaft, and gearbox) for a fraction of a second. If compressor stalls are not investigated and faults corrected, catastrophic engine or power train failures may occur.

If you suspect that compressor stalls may have occurred, you should report your observation(s) to the pilot immediately and cancel the mission. The aircraft shall remain out of service until returned to service by a Forest Service Aircraft Maintenance Inspector.

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